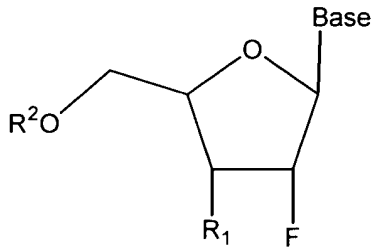
Version with Markings to Show Changes Made

In the Claims

Please amend claim 1-4, 7, 9-13, 16, 18-22, 25, 27-31, 34, and 36-38 as follows.

1. A method for the treatment of hepatitis B infection in humans, comprising administering to a patient in need thereof an effective treatment amount of a 2'-fluoro-β-D-nucleoside of the formula:



wherein

Base is a purine base;

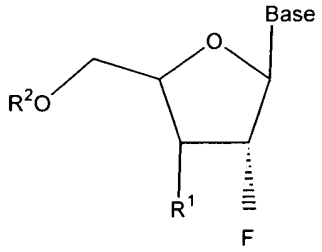
R^1 is OH, H, OR^3, N_3, CN, halogen, CF_3, lower alkyl, amino, loweralkylamino, or di(lower)alkylamino;

R^2 is H, monophosphate, diphosphate, triphosphate, a stabilized phosphate prodrug, acyl, ~~or other pharmaceutically acceptable leaving group which when administered *in vivo*, is capable of providing a compound wherein R^2 is H or phosphate; sulfonate ester, benzyl, wherein the phenyl group is optionally substituted with one or more substituents selected from the group consisting of hydroxyl, amino, alkylamino, arylamino, alkoxy, aryloxy, nitro, cyano, sulfonic acid, sulfate, phosphonic acid,~~ phosphate, ~~or~~ phosphonate~~;~~, a lipid~~,~~ **or** an amino acid~~, peptide, or cholesterol~~; and

R^3 is acyl, alkyl, phosphate, or other pharmaceutically acceptable leaving group which when administered *in vivo*, is capable of being cleaved to the parent compound, or a

pharmaceutically acceptable salt thereof, optionally in combination with a pharmaceutically acceptable carrier.

2. A method for the treatment of hepatitis C infection in humans, comprising administering to a patient in need thereof an effective treatment amount of the compound of the formula:



wherein

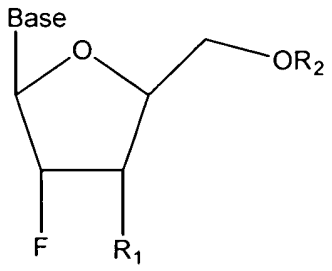
Base is a purine or pyrimidine base;

R^1 is OH, H, OR^3, N_3, CN, halogen, CF_3, lower alkyl, amino, loweralkylamino, di(lower)alkylamino, or alkoxy, and base refers to a purine or pyrimidine base;

R^2 is H, monophosphate, diphosphate, triphosphate, a stabilized phosphate prodrug, acyl, ~~or other pharmaceutically acceptable leaving group which when administered *in vivo*, is capable of providing a compound wherein R^2 is H or phosphate; sulfonate ester, benzyl, wherein the phenyl group is optionally substituted with one or more substituents selected from the group consisting of hydroxyl, amino, alkylamino, arylamino, alkoxy, aryloxy, nitro, cyano, sulfonic acid, sulfate, phosphonic acid,~~ phosphate, ~~or~~ phosphonate~~;~~, a lipid~~,~~ **or** an amino acid~~, peptide, or cholesterol~~; and

R^3 is acyl, alkyl, phosphate, or other pharmaceutically acceptable leaving group which when administered *in vivo*, is capable of being cleaved to the parent compound, or a pharmaceutically acceptable salt thereof, optionally in combination with a pharmaceutically acceptable carrier.

3. A method for the treatment of abnormal cell proliferation in humans, comprising administering to a patient in need thereof an effective treatment amount of a 2'-fluoro-β-L-nucleoside of the formula:



wherein

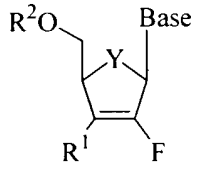
Base is a purine or pyrimidine base;

R^1 is OH, H, OR^3, N_3, CN, halogen, CF_3, lower alkyl, amino, loweralkylamino, **or** di(lower)alkylamino;

R^2 is H, phosphate, including monophosphate, diphosphate, triphosphate, or a stabilized phosphate prodrug, acyl, ~~or other pharmaceutically acceptable leaving group which when administered *in vivo*, is capable of providing a compound wherein R^2 is H or phosphate; sulfonate ester, benzyl, wherein the phenyl group is optionally substituted with one or more substituents selected from the group consisting of hydroxyl, amino, alkylamino, arylamino, alkoxy, aryloky, nitro, cyano, sulfonic acid, sulfate, phosphonic acid,~~ phosphate, ~~or~~ phosphonate~~;~~, a lipid, **or** an amino acid ~~peptide, or cholesterol~~; and

R^3 is acyl, alkyl, phosphate, or other pharmaceutically acceptable leaving group which when administered *in vivo*, is capable of being cleaved to the parent compound, or a pharmaceutically acceptable salt thereof, optionally in combination with a pharmaceutically acceptable carrier.

4. A 2'-fluoro-(β-D or β-L)-nucleoside of the formula:



Y= S, CH_2 or CHF

wherein

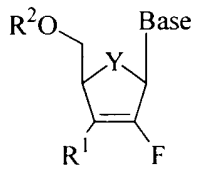
Base is a purine base;

R^1 is H, OR^3, N_3, CN, halogen, CF_3, lower alkyl, amino, loweralkylamino or di(lower)alkylamino;

R^2 is H, monophosphate, diphosphate, triphosphate, a stabilized phosphate prodrug, acyl, ~~or other pharmaceutically acceptable leaving group which when administered *in vivo*, is capable of providing a compound wherein R^2 is H or phosphate; sulfonate ester, benzyl, wherein the phenyl group is optionally substituted with one or more substituents selected from the group consisting of hydroxyl, amino, alkylamino, arylamino, alkoxy, aryloxy, nitro, cyano, sulfonic acid, sulfate, phosphonic acid,~~ phosphate, ~~or~~ phosphonate~~;~~, a lipid~~,~~ **or** an amino acid~~, peptide, or cholesterol~~; and

R^3 is acyl, alkyl, phosphate, or other pharmaceutically acceptable leaving group which when administered *in vivo*, is capable of being cleaved to the parent compound, or a pharmaceutically acceptable salt thereof, optionally in combination with a pharmaceutically acceptable carrier.

7. A pharmaceutical composition comprising an effective treatment amount of a 2'-fluoro-(β-D or β-L)-nucleoside of the formula:



Y= S, CH_2 or CHF

wherein

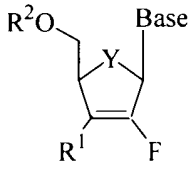
Base is a purine base;

R^1 is H, OR^3, N_3, CN, halogen, CF_3, lower alkyl, amino, loweralkylamino or di(lower)alkylamino;

R^2 is H, monophosphate, diphosphate, triphosphate, a stabilized phosphate prodrug, acyl, ~~or other pharmaceutically acceptable leaving group which when administered *in vivo*, is capable of providing a compound wherein R^2 is H or phosphate; sulfonate ester, benzyl, wherein the phenyl group is optionally substituted with one or more substituents selected from the group consisting of hydroxyl, amino, alkylamino, arylamino, alkoxy, aryloxy, nitro, cyano, sulfonic acid, sulfate, phosphonic acid,~~ phosphate, ~~or~~ phosphonate~~;~~, a lipid~~,~~ **or** an amino acid~~, peptide, or cholesterol~~; and

R^3 is acyl, alkyl, phosphate, or other pharmaceutically acceptable leaving group which when administered *in vivo*, is capable of being cleaved to the parent compound, or a pharmaceutically acceptable salt thereof, optionally in combination with a pharmaceutically acceptable carrier.

9. A method for the treatment of hepatitis B infection comprising administering to a host in need thereof an effective treatment amount of a 2'-fluoro-(β-D or β-L)-nucleoside of the formula:



Y= S, CH_2 or CHF

wherein

Base is a purine base;

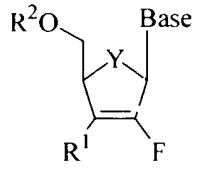
R^1 is H, OR^3, N_3, CN, halogen, CF_3, lower alkyl, amino, loweralkylamino or di(lower)alkylamino;

R^2 is H, monophosphate, diphosphate, triphosphate, a stabilized phosphate prodrug, acyl, ~~or other pharmaceutically acceptable leaving group which when administered *in vivo*, is capable of providing a compound wherein R^2 is H or phosphate; sulfonate ester,~~

~~benzyl, wherein the phenyl group is optionally substituted with one or more substituents selected from the group consisting of hydroxyl, amino, alkylamino, arylamino, alkoxy, aryloxy, nitro, cyano, sulfonic acid, sulfate, phosphonic acid,~~ phosphate, ~~or~~ phosphonate~~;~~, a lipid~~,~~ **or** an amino acid~~, peptide, or cholesterol~~; and

R^3 is acyl, alkyl, phosphate, or other pharmaceutically acceptable leaving group which when administered *in vivo*, is capable of being cleaved to the parent compound, or a pharmaceutically acceptable salt thereof, optionally in combination with a pharmaceutically acceptable carrier.

10. A method for the treatment of hepatitis C infection comprising administering to a host in need thereof an effective treatment amount of a 2'-fluoro-nucleoside of the formula:



Y= S, CH_2 or CHF

wherein

Base is a purine or pyrimidine base;

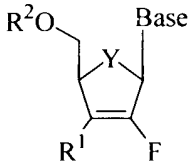
R^1 is H, OR^3, N_3, CN, halogen, CF_3, lower alkyl, amino, loweralkylamino or di(lower)alkylamino;

R^2 is H, monophosphate, diphosphate, triphosphate, a stabilized phosphate prodrug, acyl, ~~or other pharmaceutically acceptable leaving group which when administered *in vivo*, is capable of providing a compound wherein R^2 is H or phosphate; sulfonate ester, benzyl, wherein the phenyl group is optionally substituted with one or more substituents selected from the group consisting of hydroxyl, amino, alkylamino, arylamino, alkoxy, aryloxy, nitro, cyano, sulfonic acid, sulfate, phosphonic acid,~~ phosphate, ~~or~~ phosphonate~~;~~, a lipid~~,~~ **or** an amino acid~~, peptide, or cholesterol~~; and

R^3 is acyl, alkyl, phosphate, or other pharmaceutically acceptable leaving group which when administered *in vivo*, is capable of being cleaved to the parent compound, or a

pharmaceutically acceptable salt thereof, optionally in combination with a pharmaceutically acceptable carrier.

11. A method for inhibiting the replication of HIV comprising administering to a host in need thereof an effective treatment amount of a 2'-fluoro-(β-D or β-L)-nucleoside of the formula:



Y= S, CH_2 or CHF

wherein

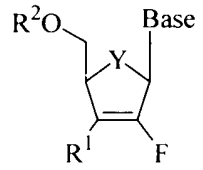
Base is a purine base;

R^1 is H, OR^3, N_3, CN, halogen, CF_3, lower alkyl, amino, loweralkylamino or di(lower)alkylamino;

R^2 is H, monophosphate, diphosphate, triphosphate, a stabilized phosphate prodrug, acyl, ~~or other pharmaceutically acceptable leaving group which when administered *in vivo*, is capable of providing a compound wherein R^2 is H or phosphate; sulfonate ester, benzyl, wherein the phenyl group is optionally substituted with one or more substituents selected from the group consisting of hydroxyl, amino, alkylamino, arylamino, alkoxy, aryloxy, nitro, cyano, sulfonic acid, sulfate, phosphonic acid,~~ phosphate, ~~or~~ phosphonate~~;~~, a lipid~~,~~ **or** an amino acid~~, peptide, or cholesterol~~; and

R^3 is acyl, alkyl, phosphate, or other pharmaceutically acceptable leaving group which when administered *in vivo*, is capable of being cleaved to the parent compound, or a pharmaceutically acceptable salt thereof, optionally in combination with a pharmaceutically acceptable carrier.

12. A method for the treatment of abnormal cell proliferation in humans comprising administering to a host in need thereof an effective treatment amount of a 2'-fluoro-nucleoside of the formula:



Y = O, S, CH_2 or CHF

wherein

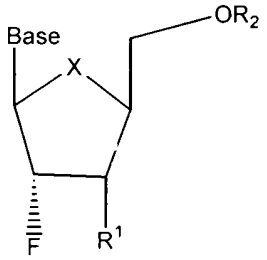
Base is a purine or pyrimidine base;

R^1 is H, OR^3, N_3, CN, halogen, CF_3, lower alkyl, amino, loweralkylamino or di(lower)alkylamino;

R^2 is H, monophosphate, diphosphate, triphosphate, a stabilized phosphate prodrug, acyl, ~~or other pharmaceutically acceptable leaving group which when administered *in vivo*, is capable of providing a compound wherein R^2 is H or phosphate; sulfonate ester, benzyl, wherein the phenyl group is optionally substituted with one or more substituents selected from the group consisting of hydroxyl, amino, alkylamino, arylamino, alkoxy, aryloxy, nitro, cyano, sulfonic acid, sulfate, phosphonic acid,~~ phosphate, ~~or~~ phosphonate~~;~~, a lipid~~,~~ **or** an amino acid~~, peptide, or cholesterol~~; and

R^3 is acyl, alkyl, phosphate, or other pharmaceutically acceptable leaving group which when administered *in vivo*, is capable of being cleaved to the parent compound, or a pharmaceutically acceptable salt thereof, optionally in combination with a pharmaceutically acceptable carrier.

13. A 2'-fluoro-β-L-nucleoside of the formula:



wherein

X is S;

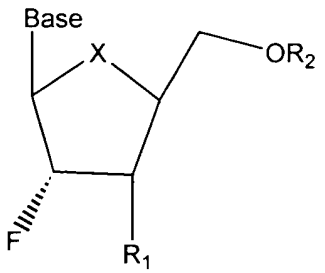
Base is a purine base;

R^1 is OH, H, OR^3, N_3, CN, halogen, CF_3, lower alkyl, amino, loweralkylamino, or di(lower)alkylamino;

R^2 is H, monophosphate, diphosphate, triphosphate, a stabilized phosphate prodrug, acyl, ~~or other pharmaceutically acceptable leaving group which when administered *in vivo*, is capable of providing a compound wherein R^2 is H or phosphate; sulfonate ester, benzyl, wherein the phenyl group is optionally substituted with one or more substituents selected from the group consisting of hydroxyl, amino, alkylamino, arylamino, alkoxy, aryloxy, nitro, cyano, sulfonic acid, sulfate, phosphonic acid,~~ phosphate, ~~or~~ phosphonate~~;~~, a lipid~~,~~ **or** an amino acid~~, peptide, or cholesterol~~; and

R^3 is acyl, alkyl, phosphate, or other pharmaceutically acceptable leaving group which when administered *in vivo*, is capable of being cleaved to the parent compound, or a pharmaceutically acceptable salt thereof, optionally in combination with a pharmaceutically acceptable carrier.

16. A pharmaceutical composition comprising an effective treatment amount of a 2'-fluoro-β-L-nucleoside of the formula:



X= S

wherein

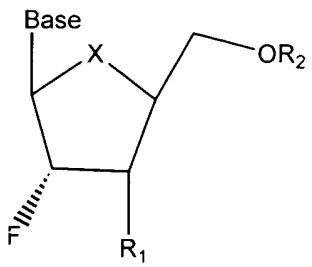
Base is a purine base;

R^1 is OH, H, OR^3, N_3, CN, halogen, CF_3, lower alkyl, amino, loweralkylamino or di(lower)alkylamino;

R^2 is H, monophosphate, diphosphate, triphosphate, a stabilized phosphate prodrug, acyl, ~~or other pharmaceutically acceptable leaving group which when administered *in vivo*, is capable of providing a compound wherein R^2 is H or phosphate; sulfonate ester, benzyl, wherein the phenyl group is optionally substituted with one or more substituents selected from the group consisting of hydroxyl, amino, alkylamino, arylamino, alkoxy, aryloxy, nitro, cyano, sulfonic acid, sulfate, phosphonic acid,~~ phosphate, ~~or~~ phosphonate~~;~~, a lipid~~,~~ **or** an amino acid~~, peptide, or cholesterol~~; and

R^3 is acyl, alkyl, phosphate, or other pharmaceutically acceptable leaving group which when administered *in vivo*, is capable of being cleaved to the parent compound, or a pharmaceutically acceptable salt thereof, optionally in combination with a pharmaceutically acceptable carrier.

18. A method for the treatment of hepatitis B infection comprising administering to a patient in need thereof an effective treatment amount of a 2'-fluoro-β-L-nucleoside of the formula:



X= S

wherein

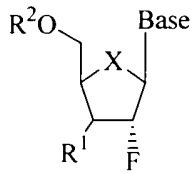
Base is a purine base;

R^1 is OH, H, OR^3, N_3, CN, halogen, CF_3, lower alkyl, amino, loweralkylamino or di(lower)alkylamino;

R^2 is H, monophosphate, diphosphate, triphosphate, a stabilized phosphate prodrug, acyl, ~~or other pharmaceutically acceptable leaving group which when administered *in vivo*, is capable of providing a compound wherein R^2 is H or phosphate; sulfonate ester, benzyl, wherein the phenyl group is optionally substituted with one or more substituents selected from the group consisting of hydroxyl, amino, alkylamino, arylamino, alkoxy, aryloxy, nitro, cyano, sulfonic acid, sulfate, phosphonic acid,~~ phosphate, ~~or~~ phosphonate~~;~~, a lipid~~,~~ **or** an amino acid~~, peptide, or cholesterol~~; and

R^3 is acyl, alkyl, phosphate, or other pharmaceutically acceptable leaving group which when administered *in vivo*, is capable of being cleaved to the parent compound, or a pharmaceutically acceptable salt thereof, optionally in combination with a pharmaceutically acceptable carrier.

19. A method for the treatment of hepatitis C infection comprising administering to a host in need thereof an effective treatment amount of a 2'-fluoro-(β-L)-nucleoside of the formula:



X = S, CH_2 or O

wherein

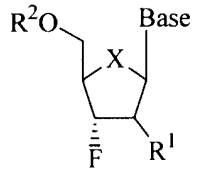
Base is a purine or pyrimidine base;

R^1 is OH, H, OR^3, N_3, CN, halogen, CF_3, lower alkyl, amino, loweralkylamino or di(lower)alkylamino;

R^2 is H, monophosphate, diphosphate, triphosphate, a stabilized phosphate prodrug, acyl, ~~or other pharmaceutically acceptable leaving group which when administered *in vivo*, is capable of providing a compound wherein R^2 is H or phosphate; sulfonate ester, benzyl, wherein the phenyl group is optionally substituted with one or more substituents selected from the group consisting of hydroxyl, amino, alkylamino, arylamino, alkoxy, aryloxy, nitro, cyano, sulfonic acid, sulfate, phosphonic acid,~~ phosphate, ~~or~~ phosphonate~~;~~, a lipid~~,~~ **or** an amino acid~~, peptide, or cholesterol~~; and

R^3 is acyl, alkyl, phosphate, or other pharmaceutically acceptable leaving group which when administered *in vivo*, is capable of being cleaved to the parent compound, or a pharmaceutically acceptable salt thereof, optionally in combination with a pharmaceutically acceptable carrier.

20. A method for the inhibition of HIV comprising administering to a host in need thereof an effective treatment amount of a 2'-fluoro-β-L-nucleoside of the formula:



X = S

wherein

Base is a purine base;

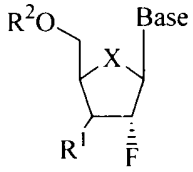
R^1 is OH, H, OR^3, N_3, CN, halogen, CF_3, lower alkyl, amino, loweralkylamino, or di(lower)alkylamino;

R^2 is H, monophosphate, diphosphate, triphosphate, a stabilized phosphate prodrug, acyl, ~~or other pharmaceutically acceptable leaving group which when administered *in vivo*,~~

~~is capable of providing a compound wherein R^2 is H or phosphate; sulfonate ester, benzyl, wherein the phenyl group is optionally substituted with one or more substituents selected from the group consisting of hydroxyl, amino, alkylamino, arylamino, alkoxy, aryloxy, nitro, cyano, sulfonic acid, sulfate, phosphonic acid,~~ phosphate, ~~or~~ phosphonate~~;~~, a lipid~~,~~ **or** an amino acid~~, peptide, or cholesterol~~; and

R^3 is acyl, alkyl, phosphate, or other pharmaceutically acceptable leaving group which when administered *in vivo*, is capable of being cleaved to the parent compound, or a pharmaceutically acceptable salt thereof, optionally in combination with a pharmaceutically acceptable carrier.

21. A method for the treatment of abnormal cellular proliferation in humans comprising administering to a host in need thereof an effective treatment amount of a 2'-fluoro-nucleoside of the formula:



X = S or CH_2

wherein

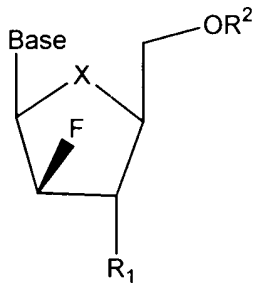
Base is a purine or pyrimidine base;

R^1 is OH, H, OR^3, N_3, CN, halogen, CF_3, lower alkyl, amino, loweralkylamino, or di(lower)alkylamino;

R^2 is H, monophosphate, diphosphate, triphosphate, a stabilized phosphate prodrug, acyl, ~~or other pharmaceutically acceptable leaving group which when administered *in vivo*, is capable of providing a compound wherein R^2 is H or phosphate; sulfonate ester, benzyl, wherein the phenyl group is optionally substituted with one or more substituents selected from the group consisting of hydroxyl, amino, alkylamino, arylamino, alkoxy, aryloxy, nitro, cyano, sulfonic acid, sulfate, phosphonic acid,~~ phosphate, ~~or~~ phosphonate~~;~~, a lipid~~,~~ **or** an amino acid~~, peptide, or cholesterol~~; and

R^3 is acyl, alkyl, phosphate, or other pharmaceutically acceptable leaving group which when administered *in vivo*, is capable of being cleaved to the parent compound, or a pharmaceutically acceptable salt thereof, optionally in combination with a pharmaceutically acceptable carrier.

22. A 2'-fluoro-β-L-nucleoside of the formula:



X=S

wherein

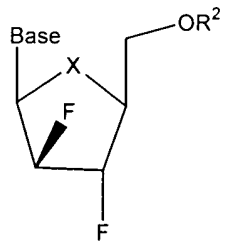
Base is a purine base;

R^1 is H, OR^3, N_3, CN, halogen, CF_3, lower alkyl, amino, loweralkylamino or di(lower)alkylamino;

R^2 is H, monophosphate, diphosphate, triphosphate, a stabilized phosphate prodrug, acyl, ~~or other pharmaceutically acceptable leaving group which when administered *in vivo*, is capable of providing a compound wherein R^2 is H or phosphate; sulfonate ester, benzyl, wherein the phenyl group is optionally substituted with one or more substituents selected from the group consisting of hydroxyl, amino, alkylamino, arylamino, alkoxy, aryloxy, nitro, cyano, sulfonic acid, sulfate, phosphonic acid,~~ phosphate, ~~or~~ phosphonate~~;~~, a lipid~~,~~ **or** an amino acid~~, peptide, or cholesterol~~; and

R^3 is acyl, alkyl, phosphate, or other pharmaceutically acceptable leaving group which when administered *in vivo*, is capable of being cleaved to the parent compound, or a pharmaceutically acceptable salt thereof, optionally in combination with a pharmaceutically acceptable carrier.

25. A pharmaceutical composition comprising an effective treatment amount of a 2'-fluoro-β-L-nucleoside of the formula:



X=S

wherein

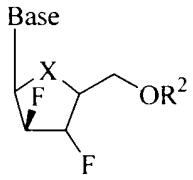
Base is a purine base; and

~~R^1 is H, OR^3, N_3, CN, halogen, CF_3, lower alkyl, amino, loweralkylamino, di(lower)alkylamino;~~

R^2 is H, monophosphate, diphosphate, triphosphate, a stabilized phosphate prodrug, acyl, ~~or other pharmaceutically acceptable leaving group which when administered *in vivo*, is capable of providing a compound wherein R^2 is H or phosphate; sulfonate ester, benzyl, wherein the phenyl group is optionally substituted with one or more substituents selected from the group consisting of hydroxyl, amino, alkylamino, arylamino, alkoxy, aryloxy, nitro, cyano, sulfonic acid, sulfate, phosphonic acid,~~ phosphate, ~~or~~ phosphonate~~;~~, a lipid~~,~~ **or** an amino acid~~, peptide, or cholesterol; and~~ **optionally in combination with a pharmaceutically acceptable carrier**.

~~R^3 is acyl, alkyl, phosphate, or other pharmaceutically acceptable leaving group which when administered *in vivo*, is capable of being cleaved to the parent compound, or a pharmaceutically acceptable salt thereof, in combination with a pharmaceutically acceptable carrier.~~

27. A method for the treatment of hepatitis B infection comprising administering to a host in need thereof an effective treatment amount of a 2'-β-fluoro-β-L-nucleoside of the formula:



X=S

wherein

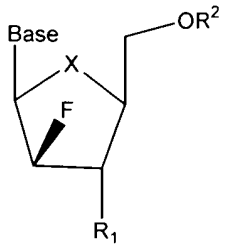
Base is a purine base; and

~~R^1 is OH, H, OR^3, N_3, CN, halogen, CF_3, lower alkyl, amino, loweralkylamino, or di(lower)alkylamino;~~

R^2 is H, monophosphate, diphosphate, triphosphate, a stabilized phosphate prodrug, acyl, ~~or other pharmaceutically acceptable leaving group which when administered *in vivo*, is capable of providing a compound wherein R^2 is H or phosphate; sulfonate ester, benzyl, wherein the phenyl group is optionally substituted with one or more substituents selected from the group consisting of hydroxyl, amino, alkylamino, arylamino, alkoxy, aryloxy, nitro, cyano, sulfonic acid, sulfate, phosphonic acid,~~ phosphate, ~~or~~ phosphonate~~;~~, a lipid~~,~~ **or** an amino acid~~, peptide, or cholesterol; and~~ **optionally in combination with a pharmaceutically acceptable carrier**.

~~R^3 is acyl, alkyl, phosphate, or other pharmaceutically acceptable leaving group which when administered *in vivo*, is capable of being cleaved to the parent compound, or a pharmaceutically acceptable salt thereof, in combination with a pharmaceutically acceptable carrier.~~

28. A method for the treatment of hepatitis C infection comprising administering to a patient in need thereof an effective treatment amount of a 2-fluoro-β-L-nucleoside of the formula:



X=S or CH_2

wherein

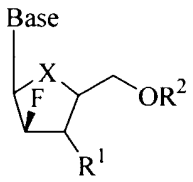
Base is a purine or pyrimidine base;

R^1 is OH, H, OR^3, N_3, CN, halogen, CF_3, lower alkyl, amino, loweralkylamino or di(lower)alkylamino;

R^2 is H, monophosphate, diphosphate, triphosphate, a stabilized phosphate prodrug, acyl, ~~or other pharmaceutically acceptable leaving group which when administered *in vivo*, is capable of providing a compound wherein R^2 is H or phosphate; sulfonate ester, benzyl, wherein the phenyl group is optionally substituted with one or more substituents selected from the group consisting of hydroxyl, amino, alkylamino, arylamino, alkoxy, aryloxy, nitro, cyano, sulfonic acid, sulfate, phosphonic acid,~~ phosphate, ~~or~~ phosphonate~~;~~, a lipid~~,~~ **or** an amino acid~~, peptide, or cholesterol~~; and

R^3 is acyl, alkyl, phosphate, or other pharmaceutically acceptable leaving group which when administered *in vivo*, is capable of being cleaved to the parent compound, or a pharmaceutically acceptable salt thereof, optionally in combination with a pharmaceutically acceptable carrier.

29. A method for the inhibition of HIV comprising administering to a host in need thereof an effective treatment amount of a 2'-fluoro-β-L-nucleoside of the formula:



X=S or CH_2

wherein

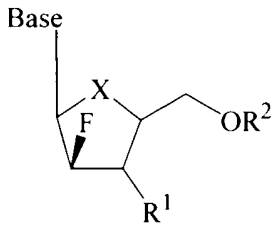
Base is a purine base;

R^1 is OH, H, OR^3, N_3, CN, halogen, CF_3, lower alkyl, amino, loweralkylamino, or di(lower)alkylamino;

R^2 is H, monophosphate, diphosphate, triphosphate, a stabilized phosphate prodrug, acyl, ~~or other pharmaceutically acceptable leaving group which when administered *in vivo*, is capable of providing a compound wherein R^2 is H or phosphate; sulfonate ester, benzyl, wherein the phenyl group is optionally substituted with one or more substituents selected from the group consisting of hydroxyl, amino, alkylamino, arylamino, alkoxy, aryloxy, nitro, cyano, sulfonic acid, sulfate, phosphonic acid,~~ phosphate, ~~or~~ phosphonate~~;~~, a lipid~~,~~ **or** an amino acid~~, peptide, or cholesterol~~; and

R^3 is acyl, alkyl, phosphate, or other pharmaceutically acceptable leaving group which when administered *in vivo*, is capable of being cleaved to the parent compound, or a pharmaceutically acceptable salt thereof, optionally in combination with a pharmaceutically acceptable carrier.

30. A method for the treatment of abnormal cellular proliferation in humans comprising administering to a host in need thereof an effective treatment amount of a 2'-fluoro-β-L-nucleoside of the formula:



$X = S$ or CH_2

wherein

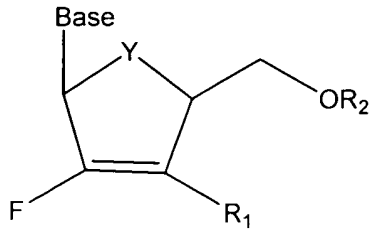
Base is a purine or pyrimidine base;

R^1 is H, OR^3, N_3, CN, halogen, CF_3, lower alkyl, amino, loweralkylamino, or di(lower)alkylamino;

R^2 is H, monophosphate, diphosphate, triphosphate, a stabilized phosphate prodrug, acyl, ~~or other pharmaceutically acceptable leaving group which when administered *in vivo*, is capable of providing a compound wherein R^2 is H or phosphate; sulfonate ester, benzyl, wherein the phenyl group is optionally substituted with one or more substituents selected from the group consisting of hydroxyl, amino, alkylamino, arylamino, alkoxy, aryloxy, nitro, cyano, sulfonic acid, sulfate, phosphonic acid,~~ phosphate, ~~or~~ phosphonate~~;~~, a lipid~~,~~ **or** an amino acid~~, peptide, or cholesterol~~; and

R^3 is acyl, alkyl, phosphate, or other pharmaceutically acceptable leaving group which when administered *in vivo*, is capable of being cleaved to the parent compound, or a pharmaceutically acceptable salt thereof, optionally in combination with a pharmaceutically acceptable carrier.

31. A 2'-fluoro-β-L-nucleoside of the formula:



Y=O

wherein

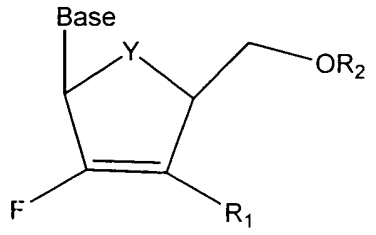
Base is a purine base;

R^1 is OR^3, N_3, CN, CF_3, lower alkyl, amino, loweralkylamino, or di(lower)alkylamino;

R^2 is H, monophosphate, diphosphate, triphosphate, a stabilized phosphate prodrug, acyl, ~~or other pharmaceutically acceptable leaving group which when administered *in vivo*, is capable of providing a compound wherein R^2 is H or phosphate; sulfonate ester, benzyl, wherein the phenyl group is optionally substituted with one or more substituents selected from the group consisting of hydroxyl, amino, alkylamino, arylamino, alkoxy, aryloxy, nitro, cyano, sulfonic acid, sulfate, phosphonic acid,~~ phosphate, ~~or~~ phosphonate~~;~~, a lipid~~,~~ **or** an amino acid~~, peptide, or cholesterol~~; and

R^3 is acyl, alkyl, phosphate, or other pharmaceutically acceptable leaving group which when administered *in vivo*, is capable of being cleaved to the parent compound, or a pharmaceutically acceptable salt thereof.

34. A pharmaceutical composition comprising an effective treatment amount of a 2'-fluoro-β-L-nucleoside of the formula:



Y=O

wherein

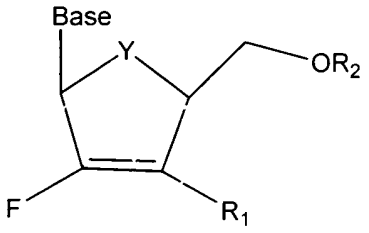
Base is a purine base;

R^1 is OR^3, N_3, CN, CF_3, lower alkyl, amino, loweralkylamino, or di(lower)alkylamino;

R^2 is H, monophosphate, diphosphate, triphosphate, a stabilized phosphate prodrug, acyl, ~~or other pharmaceutically acceptable leaving group which when administered *in vivo*, is capable of providing a compound wherein R^2 is H or phosphate; sulfonate ester, benzyl, wherein the phenyl group is optionally substituted with one or more substituents selected from the group consisting of hydroxyl, amino, alkylamino, arylamino, alkoxy, aryloxy, nitro, cyano, sulfonic acid, sulfate, phosphonic acid,~~ phosphate, ~~or~~ phosphonate~~;~~, a lipid~~,~~ **or** an amino acid~~, peptide, or cholesterol~~; and

R^3 is acyl, alkyl, phosphate, or other pharmaceutically acceptable leaving group which when administered *in vivo*, is capable of being cleaved to the parent compound, or a pharmaceutically acceptable salt thereof, together with a pharmaceutically acceptable carrier.

36. A method for the treatment of hepatitis B infection comprising administering to a patient in need thereof an effective treatment amount of a 2'-fluoro-(β-D or β-L)-nucleoside of the formula:



Y=O

wherein

Base is a purine base;

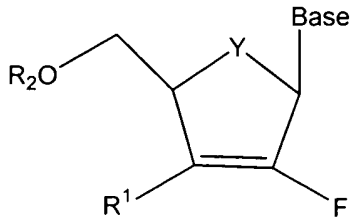
R^1 is OR^3, N_3, CN, CF_3, lower alkyl, amino, loweralkylamino, or di(lower)alkylamino;

R^2 is H, monophosphate, diphosphate, triphosphate, a stabilized phosphate prodrug, acyl, ~~or other pharmaceutically acceptable leaving group which when administered *in vivo*, is capable of providing a compound wherein R^2 is H or phosphate; sulfonate ester, benzyl, wherein the phenyl group is optionally substituted with one or more~~

~~substituents selected from the group consisting of hydroxyl, amino, alkylamino, arylamino, alkoxy, aryloxy, nitro, cyano, sulfonic acid, sulfate, phosphonic acid,~~ phosphate, ~~or~~ phosphonate~~;~~, a lipid~~,~~ **or** an amino acid~~, peptide, or cholesterol~~; and

R^3 is acyl, alkyl, phosphate, or other pharmaceutically acceptable leaving group which when administered *in vivo*, is capable of being cleaved to the parent compound, or a pharmaceutically acceptable salt thereof.

37. A method for the treatment of hepatitis C infection comprising administering to a patient in need thereof an effective treatment amount of a 2'-fluoro-nucleoside of the formula:



Y=O

wherein

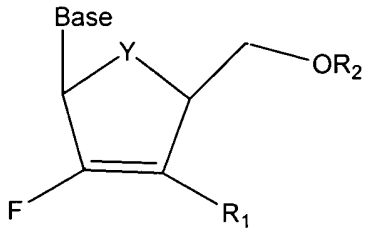
Base is a purine or pyrimidine base;

R^1 is OH, OR^3, N_3, CN, CF_3, lower alkyl, amino, loweralkylamino, or di(lower)alkylamino, and base refers to a purine or pyrimidine base;

R^2 is H, monophosphate, diphosphate, triphosphate, a stabilized phosphate prodrug, acyl, ~~or other pharmaceutically acceptable leaving group which when administered *in vivo*, is capable of providing a compound wherein R^2 is H or phosphate; sulfonate ester, benzyl, wherein the phenyl group is optionally substituted with one or more substituents selected from the group consisting of hydroxyl, amino, alkylamino, arylamino, alkoxy, aryloxy, nitro, cyano, sulfonic acid, sulfate, phosphonic acid,~~ phosphate, ~~or~~ phosphonate~~;~~, a lipid~~,~~ **or** an amino acid~~, peptide, or cholesterol~~; and

R^3 is acyl, alkyl, phosphate, or other pharmaceutically acceptable leaving group which when administered *in vivo*, is capable of being cleaved to the parent compound, or a pharmaceutically acceptable salt thereof.

38. A method for inhibiting the replication of HIV comprising administering to a patient in need thereof an effective treatment amount of a 2'-fluoro-β-L-nucleoside of the formula:



Y=O

wherein

Base is a purine base;

R^1 is OR^3, N_3, CN, CF_3, lower alkyl, amino, loweralkylamino, or di(lower)alkylamino;

R^2 is H, monophosphate, diphosphate, triphosphate, a stabilized phosphate prodrug, acyl, ~~or other pharmaceutically acceptable leaving group which when administered *in vivo*, is capable of providing a compound wherein R^2 is H or phosphate; sulfonate ester, benzyl, wherein the phenyl group is optionally substituted with one or more substituents selected from the group consisting of hydroxyl, amino, alkylamino, arylamino, alkoxy, aryloxy, nitro, cyano, sulfonic acid, sulfate, phosphonic acid,~~ phosphate, ~~or~~ phosphonate~~;~~, a lipid~~,~~ **or** an amino acid~~, peptide, or cholesterol~~; and

R^3 is acyl, alkyl, phosphate, or other pharmaceutically acceptable leaving group which when administered *in vivo*, is capable of being cleaved to the parent compound, or a pharmaceutically acceptable salt thereof.